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EXAMINER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>24 April 2008</u>.
2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-17</u> is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) <u>1-17</u> is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☒ The drawing(s) filed on <u>20 November 2003</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☒ All   b)☐ Some * c)☐ None of:
      1.☒ Certified copies of the priority documents have been received.
      2.☐ Certified copies of the priority documents have been received in Application No. _____.
      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
   Paper No(s)/Mail Date <u>05/21/2008</u>.

4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____ .

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1.   A request for continued examination under 37 CFR 1.114, including the

fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection.

Since this application is eligible for continued examination under 37 CFR 1.114,

and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the

previous Office action has been withdrawn pursuant to 37 CFR 1.114.

Applicant's submission filed on 04/24/2008 has been entered.

Priority

2.   Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d),

which papers have been placed of record in the file.

Information Disclosure Statement

3.   The information disclosure statement (IDS) submitted on 05/21/2008 has

been considered by the examiner.

Response to Arguments

4.   Applicant's arguments filed 04/24/2008 have been fully considered but

they are not persuasive.

5.   With respect to applicant's argument that Lobiondo and Thompson, alone

or in combination, fail to disclose or suggest "the selected image forming device

includes, a sensor for reading the code from the formed image, the image

forming device comparing the formed image with the image data for matching

check using the code," as recited in amended claim 1.

In reply: Lobiondo '194 does not explicitly show wherein the selected

image forming device includes a sensor for reading the code from the formed

image, the image forming device comparing the formed image with the image

data for a matching check using the code.

However, the above-mentioned claimed limitations are well known in the

art as evidenced by Farrell '426. In particular, Farrell '426 teaches wherein the

selected image forming device (Printer 16, fig. 2) includes a sensor (Place

Marker Relative to Print Job 60, fig. 3) for reading the code from the formed

image (i.e., the markers can be configured as machine-readable and/or human

readable descriptions of the desired finishing printed on the edge of oversized

output media or on pages containing job content, for example, by watermark,

glyph, barcode and the like; Col. 5, lines 30-35), the image forming device

comparing the formed image with the image data for a matching check using the

code (i.e., a processor in communication with both the user interface and the

finishing element determines compatibility between the finishing element and the

desired finishing instruction. Upon a determination of incompatibility, a

compatible finishing instruction for the finishing element is then selected; Col. 2,

lines 62-67).

Claim Rejections - 35 USC § 103

6.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for

all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described
> as set forth in section 102 of this title, if the differences between the subject matter sought to
> be patented and the prior art are such that the subject matter as a whole would have been
> obvious at the time the invention was made to a person having ordinary skill in the art to which
> said subject matter pertains. Patentability shall not be negatived by the manner in which the
> invention was made.

7.   Claims 1, 7-12 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Lobiondo (US 5,287,194) in view of Farrell (US 6,873,426).

Regarding claim 1, Lobiondo '194 discloses an image forming system

comprising:

a plurality of devices (i.e., a plurality of workstations 30; Col. 3, line 27, fig.

1) including at least an image forming device (i.e., printers 10 attached to a

network; see col. 2, lines 23, fig. 1) which forms an image including a code

(Software, col. 3, line 42) based on image data (i.e., a Print-shop Scheduler 50,

which may be in hardware or software, is located within the network either at the

print server 60 or at various local workstations 30 within the network for analyzing

the information relating to the job; Col. 3, lines 41-45), a control device

(workstations 30, col. 3, line 27, fig. 1) which controls an operation of the image

forming device based on an instruction input through a user interface (User

Interface 40; Col. 3, line 32, fig. 2), and an input device (Modem 25, fig. 1) which

inputs the image data (i.e., modems 25 which interconnect the printers 10 across

communication channels of communication link 20, such as a telephone line; Col.

3, lines 24-27, fig. 1);

a communication controller (Print Server 60, fig. 1), which can communicate with each of the plurality of devices (Fig. 1), and, when the communication controller receives a command transmitted from any one of the plurality of devices (i.e., the print server 60 or at various local workstations 30 within the network for analyzing the information relating to the job; Col. 3, lines 43-45), based on the received command (Print job command, col. 3, lines 50-65), selects at least one device as a transmission destination from the plurality of devices except a transmission source of the received command (col. 4, lines 50-65), and transmits the received command to the selected device (i.e., scheduling the printing of print jobs at one or more of the printers 10 to obtain an efficient use of all available resources; Col. 3, lines 48-50),

wherein the input device (Modem 25, fig. 1) transfers the image data to a selected image forming device (Printers 10, fig. 1) via the communication control device (Print Server 60, fig. 1) without routing through the control device (Workstation 30, fig. 1), when a command is input to the input device (i.e., the network from which inputs for jobs to be printed can be entered; Col. 3, lines 28-29),

Lobiondo '194 does not explicitly show wherein the selected image forming device includes a sensor for reading the code from the formed image, the image forming device comparing the formed image with the image data for a matching check using the code.

However, the above-mentioned claimed limitations are well known in the art as evidenced by Farrell '426. In particular, Farrell '426 teaches wherein the selected image forming device (Printer 16, fig. 2) includes a sensor (Place Marker Relative to Print Job 60, fig. 3) for reading the code from the formed image (i.e., the markers can be configured as machine-readable and/or human readable descriptions of the desired finishing printed on the edge of oversized output media or on pages containing job content, for example, by watermark, glyph, barcode and the like; Col. 5, lines 30-35), the image forming device comparing the formed image with the image data for a matching check using the code (i.e., a processor in communication with both the user interface and the finishing element determines compatibility between the finishing element and the desired finishing instruction. Upon a determination of incompatibility, a compatible finishing instruction for the finishing element is then selected; Col. 2, lines 62-67).

In view of the above, having the system of Lobiondo and then given the well-established teaching of Farrell, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify the system of Lobiondo as taught by Farrell to include: wherein the selected image forming device includes a sensor for reading the code from the formed image, the image forming device comparing the formed image with the image data for a matching check using the code, since Farrell stated in col. 1, lines 25-30 that such a modification would ensure increasingly today printers are fitted with finishing terminals capable of providing a limited selection of finishing

capabilities. Use of these printers can reduce the number of steps needed, i.e.

the number of machines to which the print job must be transported, to complete a

particular job.

Regarding claim 7, Lobiondo '194 discloses the image forming system,

wherein the communication controller (the print server 60, col. 3, line 41)

comprises a memory (i.e., the information, which contains criteria for printing the

job, can be sent to and temporarily stored in a buffer, RAM or other storage

means located within a print server 60; see col. 3, lines 37-40) in which relation

information (i.e., the scheduler 50, a database can include one or more files

having information relating to the print job and the resources on the network; see

col. 3, lines 65-68, fig. 3) between the type of the command and a device serving

as a transmission destination is stored (an input data file in memory, col. 3, line

60),

selects a device relating to the received command based on the relation

information (i.e., the database can include a printer file which can be located in

memory containing information relating to each printer; see col. 3, line 68 and

col. 4, lines 1-2).

Regarding claim 8, Lobiondo '194 discloses the image forming system (fig.

1), wherein the communication controller is arranged in the image forming device

(i.e., the reprographic machine 30 generally includes a scanner section 35, a

controller section 45, and a printer section 55; see col. 5, line 68 and col. 6, lines

1-2, fig. 2).

Regarding claim 9, Lobiondo '194 discloses a communication control

device (the print server 60, fig. 1) included in the image forming system (Fig. 1),

the communication control device comprising:

a plurality of communication controllers (communication channels of

communication link 20, fig. 1) corresponding to each of a plurality of devices (i.e.,

the network can be a LAN and may comprise one or more modems 25 which

interconnect the printers 10 across communication channels of communication

link 20, and the workstations 30 can be a PC computer system; see col. 3, lines

20-30) included in the image forming system (Fig. 1);

a controller (user, col. 2, line 33), which performs control so that when a

command is transmitted from any one of the plurality of devices through the

communication controller corresponding to the selected devices (i.e., a user at

any local area within the network to control printing of a job at a plurality of user

determined locations; see col. 2, lines 33-35), at least one device is selected as a

transmission destination from the plurality of devices except a transmission

source of the received command (i.e., the user may then enter through the user

interface a request to utilize a different printer; see col. 5, lines 27-28), and

control is performed such that the received command is transmitted to the

selected device through the communication controller corresponding to the

selected device (i.e., enter a required completion time and have the scheduler 50

allocate the job to one or more available printers, or choose the selected full print

queue if printing is desired at the specific location selected; see col. 5, lines 29-

32),

wherein the plurality of devices (Fig. 1) includes at least an image forming

device (remote printers 10, col. 2, line 23, fig. 1) that forms an image including a

code (Software, col. 3, line 42) based on image data (i.e., a Print-shop Scheduler

50, which may be in hardware or software, is located within the network either at

the print server 60 or at various local workstations 30 within the network for

analyzing the information relating to the job; Col. 3, lines 41-45), a control device

(workstations 30, col. 3, line 27, fig. 1) that controls an operation of the image

forming device based on an instruction input through a user interface (User

Interface 40; Col. 3, line 32, fig. 2), and an input device (Modem 25, fig. 1) that

inputs the image data, and

wherein the input device (Modem 25, fig. 1) transfers the image data to a

selected image forming device (Printers 10, fig. 1) via the communication control

device (Print Server 60, fig. 1) without routing through the control device

(Workstation 30, fig. 1), when a command is input to the input device (i.e., the

network from which inputs for jobs to be printed can be entered; Col. 3, lines 28-

29),

Lobiondo '194 does not explicitly show wherein the selected image

forming device includes a sensor for reading a code from the formed image, the

image forming device comparing the formed image with the image data for a

matching check using the code.

However, the above-mentioned claimed limitations are well known in the art as evidenced by Farrell '426. In particular, Farrell '426 teaches wherein the selected image forming device (Printer 16, fig. 2) includes a sensor (Place Marker Relative to Print Job 60, fig. 3) for reading the code from the formed image (i.e., the markers can be configured as machine-readable and/or human readable descriptions of the desired finishing printed on the edge of oversized output media or on pages containing job content, for example, by watermark, glyph, barcode and the like; Col. 5, lines 30-35), the image forming device comparing the formed image with the image data for a matching check using the code (i.e., a processor in communication with both the user interface and the finishing element determines compatibility between the finishing element and the desired finishing instruction. Upon a determination of incompatibility, a compatible finishing instruction for the finishing element is then selected; Col. 2, lines 62-67).

In view of the above, having the system of Lobiondo and then given the well-established teaching of Farrell, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify the system of Lobiondo as taught by Farrell to include: wherein the selected image forming device includes a sensor for reading the code from the formed image, the image forming device comparing the formed image with the image data for a matching check using the code, since Farrell stated in col. 1, lines 25-30 that such a modification would ensure increasingly today printers are fitted with finishing terminals capable of providing a limited selection of finishing

capabilities. Use of these printers can reduce the number of steps needed, i.e.

the number of machines to which the print job must be transported, to complete a

particular job.

Regarding claim 10, Lobiondo '194 discloses the communication control

device (the print server 60, col. 3, line 41), further comprising a memory (i.e., the

information, which contains criteria for printing the job, can be sent to and

temporarily stored in a buffer, RAM or other storage means located within a print

server 60; see col. 3, lines 37-40) in which relation information (i.e., the scheduler

50, a database can include one or more files having information relating to the

print job and the resources on the network; see col. 3, lines 65-68, fig. 3)

between the type of the command and a device serving as a transmission

destination is stored (an input data file in memory, col. 3, line 60),

wherein a device related to the received command is selected based on

the relation information (i.e., the database can include a printer file which can be

located in memory containing information relating to each printer; see col. 3, line

68 and col. 4, lines 1-2).

Regarding claim 11, Lobiondo '194 discloses the communication control

device (the print server 60, col. 3, line 41), wherein the communication control

device is arranged in the image forming device (i.e., the reprographic machine 30

generally includes a scanner section 35, a controller section 45, and a printer

section 55; see col. 5, line 68 and col. 6, lines 1-2, fig. 2).

Regarding claim 12, claim 12 is a method claim of device claim 1.

Therefore, claim 12 is rejected with the reason given in claim 1.

8.   Claims 2, 6, 13, 17 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Lobiondo (US 5,287,194) in view of Farrell (US 6,873,426),

and further in view of Akiyama et al. (US 5,594,653).

Regarding claim 2, Lobiondo '194 discloses the image forming system,

wherein the communication controller (the print server 60, col. 3, line 41) selects

the control device (workstations 30, col. 3, line 27, fig. 1) and the input device

(scanner 35 of col. 6, line 1) as transmission destinations,

The combination of Lobiondo '194 and Farrell '426 does not explicitly

show the image forming system, when the received command is a command

from the image forming device which requests the image data to be transferred in

response to the time the image is formed.

However, Akiyama '653 teaches the image forming system, select the

input device when the received command is a command from the image forming

device which requests the image data to be transferred in response to the time

the image is formed (col. 16, lines 60-67 and col. 17, lines 1-5).

Therefore, it would have been obvious to a person with ordinary skill in the

art at the time the invention was made to have modified the system of Lobiondo

and Farrell to include: the image forming system, select the input device when

the received command is a command from the image forming device which

requests the image data to be transferred in response to the time the image is
formed.

It would have been obvious to a person with ordinary skill in the art at the
time the invention was made to have modified the system of Lobiondo and Farrell
because: It relates to a printing apparatus connected to a host computer for
printing according to commands from the host computer (see Akiyama, col. 1,
lines 1-5).

Regarding claim 6, the combination of Lobiondo '194 and Farrell '426 does
not explicitly show, wherein the communication controller selects any one of the
control device and the input device as a transmission destination when the
received command is a command from the image forming device which provides
notification that the image data and the formed image match with each other, and
selects both the control device and the input device as transmission destinations
when the received command is a command from the image forming device,
which provides notification that the image data and the formed image do not
match with each other.

However, Akiyama teaches to send a command from a printer to an image
input device to request for data when the formed image with each other (col. 16,
lines 60-67, col. 17, lines 1-5) and send a command from the printer to both the
input device (to stop the input device from sending data) and the user (control
device, to notify user about the error) when the formed image does not match
with each other (107 and 110, fig. 10; col. 15, lines 30-40)

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified the system of Lobiondo and Farrell to include: wherein the communication controller selects any one of the control device and the input device as a transmission destination when the received command is a command from the image forming device which provides notification that the image data and the formed image match with each other, and selects both the control device and the input device as transmission destinations when the received command is a command from the image forming device, which provides notification that the image data and the formed image do not match with each other.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified the system of Lobiondo and Farrell because: It will notify the user that there is a printing error and at the same time prevent the input device to continue to send data can not be printed to prevent loss of resources.

Regarding claims 13, 17, claims 13, 17 are the method claims of device claims 2, 6, respectively. Therefore, claims 13, 17 are rejected with the reason given in device claims 2, 6.

9.   Claims 3-5, 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lobiondo (US 5,287,194) in view of Farrell (US 6,873,426), and further in view of well known prior art.

Regarding claims 3-4, Lobiondo '194 discloses the image forming system (fig. 1), wherein the communication controller (the print server 60, col. 3, line 41):

selects the image forming device (remote printers 10, col. 2, line 23, fig. 1) as a transmission destination when the received command is a command from the control device (workstations 30, col. 3, line 27, fig. 1) which requests a diagnosis of the state of the image forming device (i.e., the scheduler 50 can establish communication between a user and the system to request entering of criteria; see col. 6, lines 16-18),

Lobiondo differs from the claim 3, in that he does not explicitly teach which requests a diagnosis of the state of the image forming device and provides notification of the state of the image forming device as a result of the diagnosis.

However, it is well known in the art to: requests a diagnosis of the state of the image forming device and provides notification of the state of the image forming device as a result of the diagnosis (official notice).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified the system of Lobiondo and Farrell to include: requests a diagnosis of the state of the image forming device and provides notification of the state of the image forming device as a result of the diagnosis.

It would have been obvious to one of ordinary skill in the art because the user would know how and when the machine is broken and can fix the problem.

Regarding claims 5, 16, the combination of Lobiondo '194 and Farrell '426 does not explicitly show wherein the communication controller selects a device which performs at least some of processes for performing image control to adjust an image formed by the image forming device as a transmission destination when the received command is a command from the image forming device which provides information on the formed image.

However it is well known in the art to: wherein the communication controller selects a device which performs at least some of processes for performing image control to adjust an image formed by the image forming device as a transmission destination when the received command is a command from the image forming device which provides information on the formed image (official notice).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified the system of Lobiondo and Farrell to include: wherein the communication controller selects a device which performs at least some of processes for performing image control to adjust an image formed by the image forming device as a transmission destination when the received command is a command from the image forming device which provides information on the formed image.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified the system of Lobiondo and Farrell because it allows the user to adjust the printer remotely.

Regarding claims 14-15, claims 14-15 are the method claims of device claims 3-4, respectively. Therefore, claims 14-15 are rejected with the reason given in device claims 3-4.

Conclusion

10.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Iino (US 6,879,787) discloses image forming apparatus with self-diagnosis mode.

Kawaura (US 7,327,488) discloses image forming apparatus, program updating method and recording medium.

Tomidokoro (US 6,240,261) discloses system and method for avoiding an erroneous service person call.

11.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALLEN H. NGUYEN whose telephone number is (571)270-1229. The examiner can normally be reached on M-F from 9:00 AM-6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, King Poon can be reached on (571)-272-7440. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from

the Patent Application Information Retrieval (PAIR) system. Status information

for published applications may be obtained from either Private PAIR or Public

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free). If you would like assistance from a USPTO Customer Service

Representative or access to the automated information system, call 800-786-

9199 (IN USA OR CANADA) or 571-272-1000.

/King Y. Poon/
Supervisory Patent Examiner, Art Unit 2625

/A. H. N./
Examiner, Art Unit 2625